

REMARKS

Claims 1-3, 7-8, and 10-13 are all the claims pending in the application. Claims 1, 7 and 8 have been amended. Claim 1 has been amended to incorporate the subject matter of claim 9 and support for the further amendments to claim 1 can be found, for example, at page 10, lines 7-9 of the specification.

Claims 4-6 and 9 have been canceled without prejudice or disclaimer.

Entry of the above amendments is respectfully requested.

Initially, the Examiner is requested to acknowledge acceptance of the drawings filed on July 20, 2006.

I. Response to Rejection of claims 1 and 4-9 under 35 U.S.C. § 102(b) based on Mitsuaki

Claims 1 and 4-9 are rejected under 35 U.S.C. § 102(b) as allegedly being clearly anticipated by Mitsuaki (JP 2003-083482) (hereinafter "Mitsuaki").

Applicants respectfully traverse the rejection.

First, it is submitted that the Examiner provides no specific rationale for this rejection, and also fails to specifically point out where in Mitsuaki the presently claimed invention is disclosed. That is, it appears that the Examiner is relying upon the citation of Mitsuaki in the International Search Report submitted by Applicant. However, without providing an additional basis for rejection, (for example, specifically citing portions of Mitsuaki which would allegedly disclose the presently claimed invention) the Examiner's position is improper.

Second, it is submitted that Mitsuaki does not disclose every element of claim 1. Mitsuaki discloses a lightning resisting tube in which the circumferential area of the tube body 2 is covered with an insulating coating layer 3, and a conductive material 4 in striated or zonary

form integrally placed to the insulating coating layer 3. *See* Abstract. However, there is no teaching or suggestion in Mitsuaki of “a second resin layer” as recited in claim 1.

Hence, it is submitted that Mitsuaki does not anticipate claim 1. Accordingly, withdrawal of the rejection is respectfully requested.

II. Rejection of claims 1 and 5 under 35 U.S.C. § 102(b) based on Katsuhiro

Claims 1 and 4-9 are rejected under 35 U.S.C. § 102(b) as allegedly being clearly anticipated by Katsuhiro (JP 2002-174374) (hereinafter “Katsuhiro”).

Applicants respectfully traverse the rejection.

First, it is submitted that this rejection has the same failings discussed above with respect to the rejection based on Mitsuaki. Accordingly, it is submitted that the rejection is not proper.

Second, it is submitted that Katsuhiro does not disclose every element of claim 1. Katsuhiro discloses a lightning resisting tube in Fig. 2 in which the circumferential area of the tube body 2 is covered with an insulating layer 4 and a conductive coating layer 3. However, Katsuhiro fails to teach or suggest “a second resin layer”, as recited in claim 1, which should be coated on the conductive coating layer 3.

Hence, it is submitted that Katsuhiro does not anticipate claim 1. Accordingly, withdrawal of the rejection is respectfully requested.

III. Rejection of claims 1-13 based on Bittner

Claims 1, 4-7, and 9 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Bittner (U.S. Patent No. 3,831,636).

In addition, on page 3 of the Office Action, claims 11-13 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly being obvious over Bittner.

Applicants respectfully traverse the rejection.

Bittner does not teach every element of claim 1. Bittner discloses in Fig. 1, a first plastic foil 9, metal strips 6 and a second plastic foil 10, which cover the outer surface of a tube body 2. However, the metal layer 6 is formed by helically winding flat wires or strips made of spring steel around the tube 4. *See* col. 3, lines 7-16. Thus, the metal layer 6 is not a metal tape longitudinally extending along the tube 4, as recited in claim 1. In addition, the present specification discloses that metal tape when used alone may be broken. *See* page 10, line 24-25 of the specification.

Accordingly, Bittner does not anticipate claim 1. In addition, claim 7 depends from claim 1, and thus it is submitted that these claims are patentable for at least the same reasons as claim 1.

Regarding claims 11-13, it is submitted that Bittner neither anticipates nor renders obvious these claims for the following additional reasons.

In the present invention, the materials used for the flexible pipe, i.e., stainless steel of the corrugated metal pipe, resin layers, and metal tape made of aluminum, copper and etc, each are separately collected and are recycled. In order to make recycling easy, the first and second insulating resin layers are easily peelable, as recited in claim 11. *See* page 13, line 7 of the specification.

On the other hand, Bittner does not teach or suggest that the resin layers are easily peelable. The Examiner states that the plastic layers are inherently capable of being peeled. However, it is submitted that the Examiner's position is incorrect. When a plastic layer is laminated on another plastic layer, it would be difficult to peel each other if those plastic layers are thermally fused. *See e.g.*, page 12, lines 1-2 of the specification.

In addition, Bittner relates to a flexible pipe for use under a very high internal pressure. Thus, the metal strips are helically wrapped around the corrugated metal pipe under tension in order not to expand or deform the corrugated tube longitudinally under pressure. *See* col. 3, lines 13-15 and col. 1, lines 40-44. Also, the metal layer 6 formed by metal strips covers the surface of the tube almost completely. *See* col. 3, line 16. Further, another (second) metal layer 7 covers the outside of the second resin layer (plastic foil) 10. This metal layer 7 formed by metal strips is also laid under tension. *See* col. 3, line 31. Moreover, a third plastic foil (a third resin layer) and a jacket in form of a helically corrugated metal tube 8 cover the outside of the metal layer 7. *See* col. 3, lines 33-35. Thus, based on Bittner, if the structure that the circumferential area of the tube body 4 are covered by the resin layer 9, the metal layer 6 and the resin layer 10, one of ordinary skill in the art would necessarily have wound the metal strips around the corrugated metal tube under tension in order not to expand or deform the corrugated tube longitudinally under pressure. However, one of ordinary skill in the art would not have longitudinally extended the metal tape along the corrugated metal pipe to arrive at the claimed invention.

For at least the foregoing reasons, it is submitted that claim 11 is not anticipated by nor rendered obvious by Bittner. In addition, claims 12-13 depend from claim 11, and thus it is submitted that these claims are patentable for at least the same reasons as claim 11.

In view of the above, withdrawal of the rejection is respectfully requested.

IV. Rejection of claims 11-13 under 35 U.S.C. § 102 based on Mitsuaki

Claims 11-13 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly being obvious over Mitsuaki.

Applicants respectfully traverse the rejection.

For at least the reasons set forth in Section I above, Mitsuaki teaches a resin layer 3, but fails to teach or suggest "a second resin layer" as recited in claim 11.

Accordingly, it is submitted that claim 11 is not anticipated by nor rendered obvious by Mitsuaki.

In addition, claims 12-13 depend from claim 11, and thus it is submitted that these claims are patentable for at least the same reasons as claim 11.

Accordingly, withdrawal of the rejection is respectfully requested.

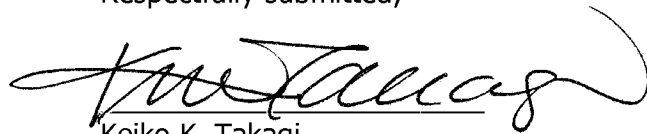
V. Conclusion

In view of the above, reconsideration and allowance of claims 1-3, 7-8 and 10-13 is respectfully requested.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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23373

CUSTOMER NUMBER

Date: June 17, 2010